

Consolidated Practice Worksheet-1

Session: 2019-2020

| Name: | Grade: | Roll No: |
|------------------|--------|----------|
| Date: | | |
| Subject: Science | | |



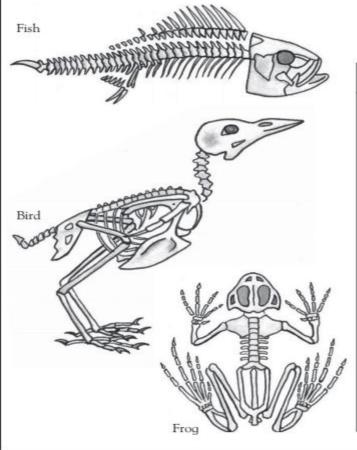
How 'bout them bones!

Background knowledge

Not all animals have bones. Animals with bony skeletons inside of them are called *vertebrates*. All vertebrates have a backbone. Vertebrates include humans, dogs, snakes, fish, and birds. Skeletons give protection and support to the body, and help it to move. Animals such as worms, insects, snails, and jellyfish do not have bony skeletons; they are called *invertebrates*.

Science activity

Here are the skeletons of a fish, a bird, and a frog. On each of the drawings, color in the part that protects the brain, and color in the backbone.



Science investigation

Take extra care ask an adult to supervise you.

Ask an adult to remove the meat from a cooked beef bone and the wing, leg, and neck of a chicken. Trace the bones onto a piece of paper and label them. Draw an arrow to a joint on the chicken wing. How does a beef bone compare to a chicken bone? Is one harder than the other?





Bones provide great support!

Background knowledge

Inside your body is a *skeleton* made of *bones*. Bones mostly contain a material called *calcium*. Your skeleton protects the soft inner parts of your body. *Muscles* pull on parts of the skeleton to make your body move. A *joint* is a place where two bones meet. Some joints allow parts of the skeleton to bend. Your skeleton provides the support you need to give your body a shape—otherwise you would be a ball of jelly!

Science activity

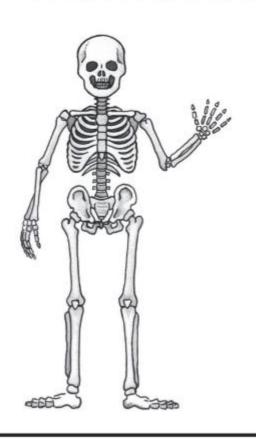
Here is a picture of a human skeleton. On the picture draw the four arrows listed below, and label them A, B, C, and D.

Arrow A should point to the part of the skeleton that protects the brain.

Arrow B should point to the joint that allows the leg to bend at the knee.

Arrow C should point to the part that protects the lungs.

Arrow D should point to the part that protects the heart.



Science investigation

Trace your hand onto a piece of paper. Feel your bones and see if you can draw a map of the bones on your hand.





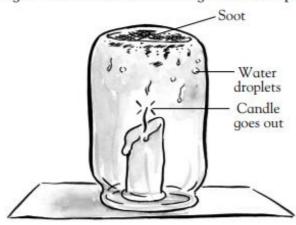
A burning matter

Background knowledge

Oxygen from the air is needed for something to burn. *Burning* is an irreversible process that forms new substances. Some of these substances are solids, such as ash or soot, and some are gases, such as water vapor and carbon dioxide. When paper burns, it produces soot (mostly carbon), water vapor, carbon dioxide, a small amount of other gases, and ash (minerals that do not burn).

Science activity

Look at the drawing. It shows a candle burning inside an upturned jam jar.



| What is produced when a candle burns? What is a possible explanation as to why the candle went out? |
|---|
| |

Science investigation

① Take extra care - ask an adult to supervise you.

Light a candle and place a jar over it. Time how long it takes for the candle to go out. When the flame goes out, let the jar cool down a bit. Carefully lift the jar, keeping the open end facing downward and placing it quickly on a table. Relight the candle. Place the jar over the candle. Does the candle burn now? If so, time how long it burns. Explain your observations.





Consolidated Practice Worksheet-2

Session: 2019-2020

| Name: | Grade:3 | Roll No: | Date: |
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| | | | |
| Subject: Science | | | |



| Name: | | |
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Conductors and Insulators

A <u>conductor</u> is a material that allows electricity to flow through it. An <u>insulator</u> is a material that electricity cannot flow through.

To determine whether an object is a conductor or insulator, you can build a simple circuit with a battery, light bulb, and three pieces of wire.



Touch the free ends of the wire to the object you are testing. If the light bulb lights up, the object is made from a conductor. if it does not, the object is made from an insulator.

Complete the table. Predict whether each item is made from a material that is a conductor or insulator. Then test each item to determine if it is made from a conductor or insulator.

| Object | Prediction: Conductor or Insulator? | Result: Conductor or Insulator? |
|------------------------|-------------------------------------|---------------------------------|
| rubber band | | |
| penny | | |
| nickel | | |
| toothpick | | |
| key | | |
| paper clip | | |
| brass paper fastener | | |
| glass microscope slide | | |
| (your choice) | | |
| (your choice) | × | |



Sound can be speedy

Background knowledge

Sound waves, or the vibrations made by sound, can travel through solids, liquids, and gases. Usually, the vibrations travel faster and farther in solids and liquids than through air. This is because the particles that transmit the vibrations are closer together. Approaching trains can be heard from far away because the vibrations travel quickly through the solid metal railroad tracks. Whales can be heard calling over very large distances in the sea because the water transmits sound faster and farther than air.

Science activity



Mary and her brother were playing in a field that had an iron railing running alongside it. When it was time to go home, Mary called to her brother from the opposite side of the field, but he did not hear her. She decided to tap the iron rail to attract his attention. Explain why this was a good idea.

Science investigation

(1) Take extra care - ask an adult to supervise you.

Make a walkie—talkie with two empty soup cans and some string. Hammer a hole into the closed ends of the cans. Pull a string or wire through the openings and tie washers to the ends so they cannot come out through the holes. Place a tape along the edges of the open end of the can for safety. Talk into one can while your friend listens in the other. Pull the string or wire taut. Why can he or she hear you? Place one can under water and listen to the other while your friend splashes. Do you hear anything? Design and conduct some of your own experiments.



On the right circuit

Observations

To light up a bulb with a battery, you need to make a *circuit*. All the parts of a circuit must be connected in the right order for the bulb to light up. This is called making a *complete circuit*.

Science activity

Vikram, Allison, Morgan, and Lata each tried to make a bulb light up using a battery and wires. Who made the bulb light up? Place a check mark (✔) in the right box.

